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JUN 29 1998

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
The Development of Operational, Technical, and)
Spectrum Requirements for Meeting Federal, State)
and Local Public Safety Agency Communications)
Requirements Through the Year 2010)

RM-9274

To: The Commission

**REPLY COMMENTS OF
THE INTERNATIONAL ASSOCIATION OF CHIEFS OF POLICE**

INTRODUCTION

1. The International Association of Chiefs of Police (IACP) hereby submits these Reply Comments in the above-captioned petition for further rulemaking.
2. Affordable, reliable and interoperable communications systems are a critical component in the rapid and effective delivery of emergency services by this nation's public safety agencies. Key to the implementation of these systems is sufficient radio spectrum in appropriate frequency bands. With a representative appointed to its Steering Committee, the IACP played a very active role on the PSWAC. The IACP continues to be concerned with spectrum management issues, as evidenced by its recently adopted position on Communications Regulatory Issues attached to this filing.
3. The IACP commends the Commission on its rapid action to secure 24 MHz of additional spectrum for public safety in the 764-806 MHz band. However, we share the concern raised in the instant NPSTC Petition that the critical, immediate spectrum

need for 2.5 MHz to address interoperability needs in the VHF and UHF band between 138 MHz and 512 MHz has yet to be addressed. As important as the need for interoperability is the need for additional spectrum in the 138-174 MHz band to relieve the pent-up demand for spectrum in this, the most popular of the public safety radio bands, as evidenced by the recent National Institute of Justice survey showing that 73% of law enforcement agencies base their operations in this VHF band.¹ NTIA's response to the Balanced Budget Act of 1997 includes the release of 3 MHz in the VHF band at 139.0-140.5 MHz and 141.5-143 MHz² (hereafter 138-144 MHz). All of the Comments filed in response to this Petition support the reallocation of this spectrum for use by state and local public safety agencies rather than for auction. Title III, in Section 3002 (c)(2), requires that "in making available bands of frequencies for competitive bidding," the Commission shall "consider the needs of existing public safety radio services." Clearly, based on the Comments filed in response to the NPSTC Petition, that consideration requires a decision not to auction the 138-144 MHz spectrum and, instead, to set it aside for use by state/local public safety agencies.

APPROPRIATE SPECTRUM

4. The NPSTC Petition correctly stated that the new 764-806 MHz band will not address many of the spectrum requirements of the thousands of current VHF public safety users. The 700-800 MHz bands are much less desirable in some types of terrain, usually requiring more expensive equipment and many more radio sites to cover the same geographic area as compared to VHF, making the band impractical and prohibitively expensive for many public safety agencies. Comments of the State of California indicate that building a statewide system in the 764-806 MHz band "will require a ten-fold increase in the number of radio sites as compared to building a similar system in the VHF Highband." This position is supported in the detailed Comments of the California Highway Patrol (CHP). The New York State Police (NYSP) likewise note an increase in infrastructure of "approximately 3 to 4 times" to cover the terrain in New York state (Comments of NYSP at 18).

COST ISSUES

5. Directly related to the increased number of sites is the additional expense of site acquisition and development, plus the added equipment to furnish these sites. The State of California estimates this increase to exceed \$1 billion for its system (Comments of the State of California). NYSP estimates its cost differential to be \$200-300 million (Comments of NYSP at 19). IACP believes the added differential startup costs to just a few states will far outweigh any auction revenue realized by the federal government.

6. The IACP is aware that statewide multi-agency systems are now in various stages of design and implementation in Montana and Wisconsin. Both of these states found their cost differentials to be so great that they could not consider building in bands above 512 MHz; both of these states have now focused on the 138-174 MHz band.

Beyond the initial costs of site acquisition, development and equipment discussed in the various comments are the continuing additional costs of maintaining these sites and the increased infrastructure to interconnect these sites to the statewide network. We note that the increased infrastructure will often include additional microwave spectrum.

IMMEDIATE IMPLEMENTATION

Use of the 746-806 MHz band will be severely restricted at least until 2006 in many areas because of incumbent television broadcast operations. While there will be indefinite use of the 138-144 MHz band at 36 military bases, with areas of interference protection ranging in most cases from 50 to 65 kilometers from those locations, large portions of the country will have little or no permanent military use of the band, including such heavily populated areas as the Northeast, Great Lakes, and Northern California regions.

The IACP notes that throughout the nation use of the 138-144 MHz band would be shared by government agencies, whether they be Department of Defense (DoD) or state/local government public safety. On this basis, through careful coordination, it should be possible to immediately begin use of this band in much of the country. Even within the 50-65 kilometer protected area noted in Paragraph 8 above, sharing may be possible because much of the DoD use in this band is for DoD on-base public safety operations.

Finally, we agree with the NPSTC Petition that the allocation for public safety use of the 138-144 MHz band will further the goals of the Justice and Treasury Departments in improving interoperability and overall public safety radio communications. However, if the 138-144 MHz band is subject to auctions, the spectrum will no longer be available for any public safety use - federal, state nor local.

INTEROPERABILITY

11. As previously noted, PSWAC recommended that 2.5 MHz be allocated immediately for an interoperability band between 138 MHz and 512 MHz,³ the most commonly used public safety bands. Other than 138-144 MHz, neither the FCC nor NTIA have yet to identify any frequencies that are likely to become available in this range in the foreseeable future. The IACP agrees with the NPSTC Petition that, while 138-144 MHz is not scheduled by NTIA for reallocation until 2008, it will be cleared of most Federal users before that time, and could readily be used on a shared basis in the interim.

12. The State of California describes in detail its use of the VHF band for interoperability in battling wildland fires as a joint effort of local, state and federal agencies. NYSP provides considerable detail with regard to Interoperability/Mutual Aid (Comments of NYSP, Section III). IACP recognizes these critical interoperability

requirements. In particular, IACP supports the limited number of channels and the interoperability channeling concept presented by NYSP (Comments of NYSP at 10).

CONTINUED PUBLIC SAFETY USE OF VHF HIGH BAND

The need for interoperability spectrum notwithstanding, the IACP believes that clearly the greatest need for this spectrum is for continued public safety use of the VHF band and to serve as green space for further “refarming” of the VHF public safety band.

14. The NPSTC Petition noted that over 65% of fire agencies and 73% of law enforcement agencies currently use the 150-174 MHz band. “The 150-170 MHz band is the principal band for fire, police, forestry, highway and other public safety activities across the country... While some of the current public safety users of the VHF band will eventually migrate to the 800 MHz range (including the newly allocated spectrum at 746-806 MHz), large numbers of public safety users are expected to remain in VHF as it will continue to provide low cost, technologically superior communications capability in many situations.” The IACP agrees that the VHF band is and will remain a critical frequency band for all aspects of public safety communications, notwithstanding the allocation of additional spectrum at 746-806 MHz. Moreover, existing VHF frequency allocations are inadequate to satisfy current or future requirements, and significant additional allocations are necessary to meet operational needs in the 138-174 MHz VHF band.

The IACP agrees with APCO, the State of California, the CHP, the NYSP and others that most of this new band needs to be reserved for wide-area, particularly statewide, systems. The long-range propagation characteristics of this band support such use. The shorter range needs of smaller agencies, particularly towns and cities that often require significant building penetration are much better served in frequency bands above 400 MHz.

The IACP agrees with the NPSTC Petition that “Modern communications networks require paired frequencies... Current congestion in the VHF band prevents rational re-channelization to create standard pairs.” The IACP supports the comments of the CHP and NYSP that most of the 138-144 MHz channels be paired to support wide area mobile relay operation (Comments of the State of California; NYSP at 26).

The NPSTC Petition proposes that new “green space” in the 138-144 MHz band could allow for new VHF pairing and for substantial “cleaning up” of the VHF band for more efficient public safety communications. The IACP agrees that converting existing VHF systems to more efficient, state-of-the-art digital operations will be difficult without additional spectrum. Conversion to digital may require “side-by-side” operation to prevent service disruption. This cannot be accomplished without “green space” for the new systems. The IACP thus strongly supports the “Refarming” concept presented by NYSP (Comments of NYSP, Section V).

Finally, the FCC's current "spectrum refarming" that in theory will relieve congestion in the VHF band, is in fact having little impact due to very large imbedded base of equipment. Until all users convert to new narrowband radio equipment, the benefits of dividing channels through refarming will remain unrealized. IACP agrees with NYSP that the 138-144 MHz "green space" will facilitate the FCC's refarming of the 150-174 MHz band (Comments of NYSP, Section V).

CONCLUSIONS

19. For the reasons set forth above, the IACP strongly agrees with the NPSTC Petition that the Commission should take all necessary steps, including seeking Congressional guidance if necessary, to secure the allocation of 139.0-140.5 and 141.5-143.0 MHz for state/local public safety operations.

Respectfully submitted,
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By: Chief Bobby D. Moody, President
Harlin R. McEwen, Chairman
IACP Communications & Technology Committee

Dated: June 29, 1998

¹ National Institute of Justice, "Wireless Communications and Interoperability Among State and Local Law Enforcement Agencies," January 1998, at 3.

² U.S. Department of Commerce, National Telecommunications and Information Administration, "Spectrum Reallocation Report: Response to Title III of the Balanced Budget act of 1997," NTIA Special Publication 98-36 (February 1998).

³ PSWAC Final Report, Volume I, at p. 21.



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Position on Communications Regulatory Issues

(Adopted By The Executive Committee on April 25, 1998)

I. Spectrum Requirements Identified by the Public Safety Wireless Advisory Committee

1. The IACP recognizes that the 24 MHz recently designated for public safety use substantially meets the Public Safety Wireless Advisory Committee (PSWAC) requirement for immediate spectrum relief. In most rural areas, the reallocated 764-806 MHz spectrum is vacant and will soon be ready for new public safety use. However, in many metropolitan areas, portions of the 24 MHz will not be available for public safety use until existing TV broadcasters in channels 60-69 vacate the band. That will not occur until 2006, and perhaps later. The IACP urges the Federal Communications Commission (FCC) not to extend this deadline and to take all steps to expedite the transition of existing NTSC and newly assigned digital TV stations out of channel 63-64 & 68-69 spectrum.
2. PSWAC identified an immediate need for 2.5 MHz of interoperability spectrum in bands between 138 and 512 MHz. The 138-144 MHz band, currently used by the Department of Defense, was identified by PSWAC as a prime candidate to meet much of this requirement. The 1997 Federal Budget legislation included a requirement that the National Telecommunications and Information Administration (NTIA) identify 20 MHz of federal spectrum below 3 GHz for reallocation to commercial services through auction. Included in NTIA's spectrum list intended to satisfy that requirement

is 3 MHz within the 138-144 MHz military band. A major national study just completed by the National Institute of Justice revealed that 73% of the nation's state and local law enforcement agencies use the adjacent 150-162 MHz band for their primary voice communications. We note that much of the law enforcement equipment currently fielded is capable of operation in the 138-144 MHz band with no modification. The IACP strongly supports the immediate allocation of this 3 MHz of spectrum to public safety to meet much of this interoperability requirement and to relieve congestion in the 150-162 MHz band.

3. The IACP calls to the FCC's attention that there remains an unsatisfied need for an additional 73 MHz by the year 2010, much of which could come from usable spectrum in bands between 1 GHz and 5 GHz.

II. WT Docket 96-86 Issues

The FCC has an active rulemaking proceeding to develop rules for the assignment and use of the new 764-806 MHz public safety band. The IACP has established the following positions regarding this proceeding:

1. IACP strongly supports the regional planning committee approach for distributing new public safety spectrum. Cities and counties need to have equal standing in the planning process and planning regions need to reflect population centers.

2. Public safety communications deals in mission critical responses where the safety of life and property is dependent upon quality communications. In order to accomplish this goal, coordination needs to be accurate, timely and use standardized tools and procedures. The IACP believes that the following frequency coordination requirements must be included:

- A single data base for coordination.
- Standardized coordination tools, in particular the Telecommunications Industry Association (TIA) TSB-88 methodology, and processes.

The IACP believes that the Association of Public Safety Communications Officials – International (APCO) is best suited to meet these requirements.

III. Adoption of a Mandatory Baseline Standard for Digital Radios

Digital interoperability (clear or encrypted), both voice and data, requires a detailed baseline digital standard to define its operation. Recognizing this fact, the PSWAC Final Report recommended that the FCC adopt such a standard within 2 years (by September, 1998), before a large imbedded base of disparate digital equipment is installed

The National Public Safety Telecommunications Council (NPSTC), other user associations, and many state and local public safety agencies supported the immediate adoption of a baseline digital standard by the FCC in response to the FCC's question on this issue in WT Docket 96-86. The FCC is currently considering these responses as it proceeds with this pending rule making.

The majority of filings recommended that the FCC adopt a digital baseline standard for over-the-air interoperability (the "common air interface" or CAI) that was developed by an accredited standard-setting organization. The TIA is the recognized wireless telecommunications standards organization in the United States and is accredited by the American National Standards Institute (ANSI). Neither equipment manufacturers nor the public safety community want the FCC to codify a particular standard (with resulting difficulties in ongoing regulatory maintenance). Rather, what is desired is that the FCC identify a single industry-recognized standard as a baseline that is required to be installed, in addition to any other operating modes, in every digital radio.

Today, there is only one such standard. Project 25, with recent activity funded by the National Institute of Justice, has been in development since 1989. Jointly sponsored by APCO (representing local government), the National Association of State Telecommunications Directors (representing state government) and agencies of the federal government, it is a user-driven standard which supports graceful migration, spectrum efficiency and competitive procurement. With five manufacturers now building compatible equipment, major Project 25 systems are being installed across the country. The IACP urges the FCC to adopt Project 25's Phase I CAI as this interoperability standard for both voice and slow speed data.